DOCKET FILE COPY ORIGINAL

Brett E. Miller
11608 Blossomwood Ct.
Moorpark, CA 93021
(805) 523-7312

ORIGINAL

August 25, 1994

Office of the Secretary
Federal Communications Commission
1919 M St., N.W.
Room 222
Washington, DC 20554

RECEIVED
AUG 26 1994
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Dear Sir/Madame:

Enclosed herewith, in original and four copies, are the comments of Brett E. Miller regarding a Notice of Proposed Rule Making, MM Docket No. 94-61, Garberville and Hydesville, California.

If there are any questions, please contact me at the above address and/or telephone number.

Thank you,

Brett E. Miller

BEM/tbh

No. of Copies rec'd 0+5
List A B C D E

DOCKET FILE COPY ORIGINAL

ORIGINAL

Before the
Federal Communications Commission
Washington, DC. 20554

In the Matter of	)	MM Docket No. 94-61
	)	
Amendment of Section 73.202(b),	)	RM-8464
Table of Allotments,	)	
FM Broadcast Stations.	)	
(Garberville and Hydesville,	)	
California)	)	
	)	
	)	

RECEIVED
AUG 26 1994
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: Chief, Allocations Branch

COMMENTS OF PETITIONER

I, Brett E. Miller, permittee of Station KWEO (FM), Channel 279C1, Garberville, California, respectfully submit these comments in support of the above-referenced Rule Making requesting the reallotment of Channel 279C1 from Garberville to Hydesville, California, and the modification of the construction permit to specify Hydesville as its community of license.

I hereby confirm my commitment to proceed with an application for a construction permit upon the reallotment as modified herein, and once the construction permit is granted, I will proceed promptly to construct the Station.

In its Notice of Proposed Rule Making, the Commission has requested further information regarding reception in the gain and loss areas. That information is contained in the attached Engineering Statement.

During the time between the filing of the Petition for Rule Making and the preparation of these Comments, and in the attempt to expedite first service at Hydesville, further engineering studies

have been conducted to prove coverage characteristics from a currently existing-and-available transmission site.

As a result of these studies, it has been determined that, from the existing-and-available transmission site from which to place a city grade signal over Hydesville, Channel 279C1 has an I.F. short spacing problem with station KXGO (FM), Arcata, CA. However, it has been determined that Channel 231C1 would be fully spaced from the existing-and-available transmission site, with the gain and loss figures shown in the attached Engineering Statement. Also indicated are several channels of various class of service which may be allocated to Garberville and/or the loss area, should there be an expression of interest.

Additionally, as the attached Engineering Statement indicates, coverage from the currently proposed reference coordinates for the Hydesville allocation will result in an improved, higher level of signal strength over Garberville than had been previously indicated in the Petition's proposed reference coordinates.

In summary, I hereby request that the current Petition for Rule Making be modified as follows:

1. The construction permit for Station KWEO (FM) be modified to provide for a change of community from Garberville, California, to Hydesville, California; and

2. The allocated Channel for KWEO (FM) be modified from Channel 279C1 to Channel 231C1.

The results of the above would be as follows:

City	Channel Number Present	Proposed
Garberville, CA	216C3, 279C1, 284C	216C3, 284C
Hydesville, CA	--	279C1

Conclusion

I am very desirous of perfecting the construction permit to construct Station KWEO (FM), while maximizing the utilization of spectrum, constructing the Station in a timely manner, and especially providing first aural service to the community of Hydesville. I believe the above proposal, as modified, is in the public interest. Within the loss area, there are several other channels available, should there be an expression of interest.

Respectfully submitted,

Brett E. Miller
11608 Blossomwood Ct.
Moorpark, CA 93021
(805) 523-7312

ENGINEERING EXHIBITS IN SUPPORT OF COMMENTS TO NOTICE OF PROPOSED RULE MAKING

August 24, 1994

Radio Station KWEO(FM)
Brett E. Miller
FCC MM Docket No. 94-61
FM Channel 231C1 ▫ 94.1 Megahertz
Hydesville, California

TELECOMMUNICATIONS ENGINEERS
LAWRENCE L. MORTON ASSOCIATES
1231 MESA OAKS LANE
MESA OAKS, CALIFORNIA 93436-2309
(805) 733-4275 / FAX (805) 733-4793

TABLE OF CONTENTS

EXHIBIT E-1
ENGINEERING STATEMENT

The information and data contained within these Engineering Exhibits were prepared on behalf of Brett E. Miller, permittee of FM broadcast station KWEO(FM), 103.7 Megahertz, Channel 279C1, in support of comments to Notice of Proposed Rule Making, MM Docket No. 94-61, released July 5, 1994. The petitioner now requests that Channel 231C1 be allotted to Hydesville instead of Channel 279C1, and that Channel 279C1 be deleted from Garberville.

I. DISCUSSION

In paragraph four of the Notice, the Commission requested additional information from the petitioner concerning existing aural broadcast services within the proposed gain and loss areas. This report serves to address these issues by providing the requested information.

Exhibit E-2 is a map showing the KWEO(FM), BMPH-930827IE, 60 dBμ service contour at Garberville and the 60 dBμ contour from a hypothetical Class C1 facility operating at the proposed allotment reference coordinates for Hydesville. The Channel 231C1 reference coordinates are:

North Latitude: 40 degrees, 25 minutes, 12 seconds
West Longitude: 124 degrees, 05 minutes, 00 seconds

For each FM station presented in these exhibits, terrain elevation data from three to sixteen kilometers on radials spaced at five-degree azimuthal intervals starting with True North were extracted from the computerized thirty-second point elevation database version of **Elevation Data for North America**, available from the Department of Commerce, National Geophysical Data Center, National Oceanic and Atmospheric Administration. A total of 131 points along each radial were linearly interpolated according to § 73.312(d).

The height above average terrain along each of the 72 radials was computed by averaging the elevations between three and sixteen kilometers below the antenna radiation center in accordance with § 73.313(d)(3).

The locations of the 60 dBμ F(50,50) service contours were calculated according to the computer methods outlined in F.C.C. publication PB-249144, **Field Strength Calculations for TV and FM Broadcasting**. The computer methods use digitized data taken directly from the graph of § 73.333 Figure 1. Intermediate values are obtained using bivariate interpolation techniques for surface fitting.

Note that, in the Petition for Rule Making, the petitioner had used terrain data extracted from the Defense Mapping Agency three arc-second point elevation database along one-degree azimuthal intervals to determine the KWEO(FM) contours from Garberville and Hydesville. In this study, however, thirty-second terrain data were used to determine the extent of the contours

from other aural broadcast services. Therefore, for consistency, the KWEO(FM) Garberville and Hydesville contours as represented herein were determined using the thirty-second terrain database. Thus, slight differences exist in the areas and populations contained within the KWEO(FM) contours from those represented in the original petition. Exhibits E-12A and E-12B tabulate the areas and populations within the Garberville and Hydesville contours, respectively, as determined using the thirty-second terrain data.

II. LOSS AREA

A study was conducted to determine the number of AM and FM stations that provide full-time aural broadcast service to the area contained within the authorized KWEO(FM) 60 dBμ service contour at Garberville that will not be served from the Hydesville facility. Exhibit E-3 shows the extent of this proposed loss area.

Pursuant to footnote five of the Notice, full-time AM reception service is defined by the station's nighttime interference-free contour for non-Class A stations, and by the 0.5 mV/m groundwave contour for Class A stations. Exhaustive nighttime interference studies were performed for all of the full-time AM facilities within the vicinity of the authorized and proposed KWEO(FM) 60 dBμ contours to determine those AM stations that provide service to the areas.

Also studied were the 60 dBμ contours of all FM stations in the area to identify those that provide some overlap to the KWEO(FM) contours at Garberville and Hydesville. Exhibit E-8 tabulates the list of stations that provide aural broadcast reception within the proposed loss area.

Exhibit E-3 shows the authorized and proposed KWEO(FM) service contours, and the service contours of the AM and FM stations that provide aural service within the proposed loss and gain areas. Exhibits E-4A through E-4D are a series of maps showing the proposed loss area and the contours of the aural service providers. Shading is used to represent the areas that receive a specific number of aural broadcast services corresponding to the number indicated in the title block of the map. Exhibit E-6 tabulates these data and depicts the populations and areas (land and water) within the identified regions.

The results of this study indicate that the proposed change in principal community will not create any white or gray areas. In fact, all but 16 persons residing within the proposed loss area will continue to receive at least three aural reception services and over 49 percent of the population will continue to receive five or more services.

III. GAIN AREA

The same type of study was performed to determine the number of existing aural broadcast reception services within the KWEO(FM) proposed gain area. A list of aural service providers is tabulated in exhibit E-9.

Exhibits E-5A and E-5B are maps showing the areas within the proposed KWEO(FM) Hydesville contour but outside of the authorized Garberville contour that already receive four and five-plus aural reception services. Again, each level of service is shaded and corresponds to the number shown in the title block.

The proposed Class C1 facility at Hydesville will result in a fifth service to 2,722 persons. These distribution data are tabulated in Exhibit E-7.

Exhibit E-10 is a map depicting the KWEO(FM) Garberville and Hydesville contours and the distribution of 1990 U.S. Census blocks in the area.

IV. ALTERNATE CHANNELS

In the event that a suitable expression of interest is received from a party desiring to provide additional service to Hydesville, Garberville or the surrounding areas, there are several channels available within the proposed loss area, including the equivalent class Channel 279C1 that the petitioner proposes to abandon.

Exhibits E-11A through E-11J show the fully spaced areas to locate these Class A, C3 and C1 channels for compliance with the spacing requirements of § 73.207. Furthermore, an applicant could available itself of the provisions of § 73.215 to expand the area in which an acceptably short-spaced transmitter site could be located.

V. CONCLUSION

The petitioner reaffirms his intention to apply for Channel 231C1 at Hydesville if it is allotted and, if authorized, to build the requested facilities promptly.

It is believed that all methods employed in making the determinations contained within this Engineering Statement were in accordance with applicable F.C.C. Rules and Regulations and good engineering practice.

Lawrence L. Morton, P.E.
Consulting Engineer to the Petitioner
August 24, 1994

AFFIDAVIT

State of California)
) **ss:**
County of Orange)

Lawrence L. Morton, being first duly sworn upon oath, deposes and says:

- That he is a qualified engineer,
- That he is a Registered Professional Engineer in the State of California,
- That he is a member of the Association of Federal Communications Consulting Engineers,
- That his qualifications are a matter of record with the Federal Communications Commission,
- That he has prepared many broadcast applications and engineering exhibits that have been filed with and granted by the Federal Communications Commission,
- That he has carried out such engineering work and that the results thereof are attached hereto and form part of this affidavit, and
- That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge.

Date: August 24, 1994

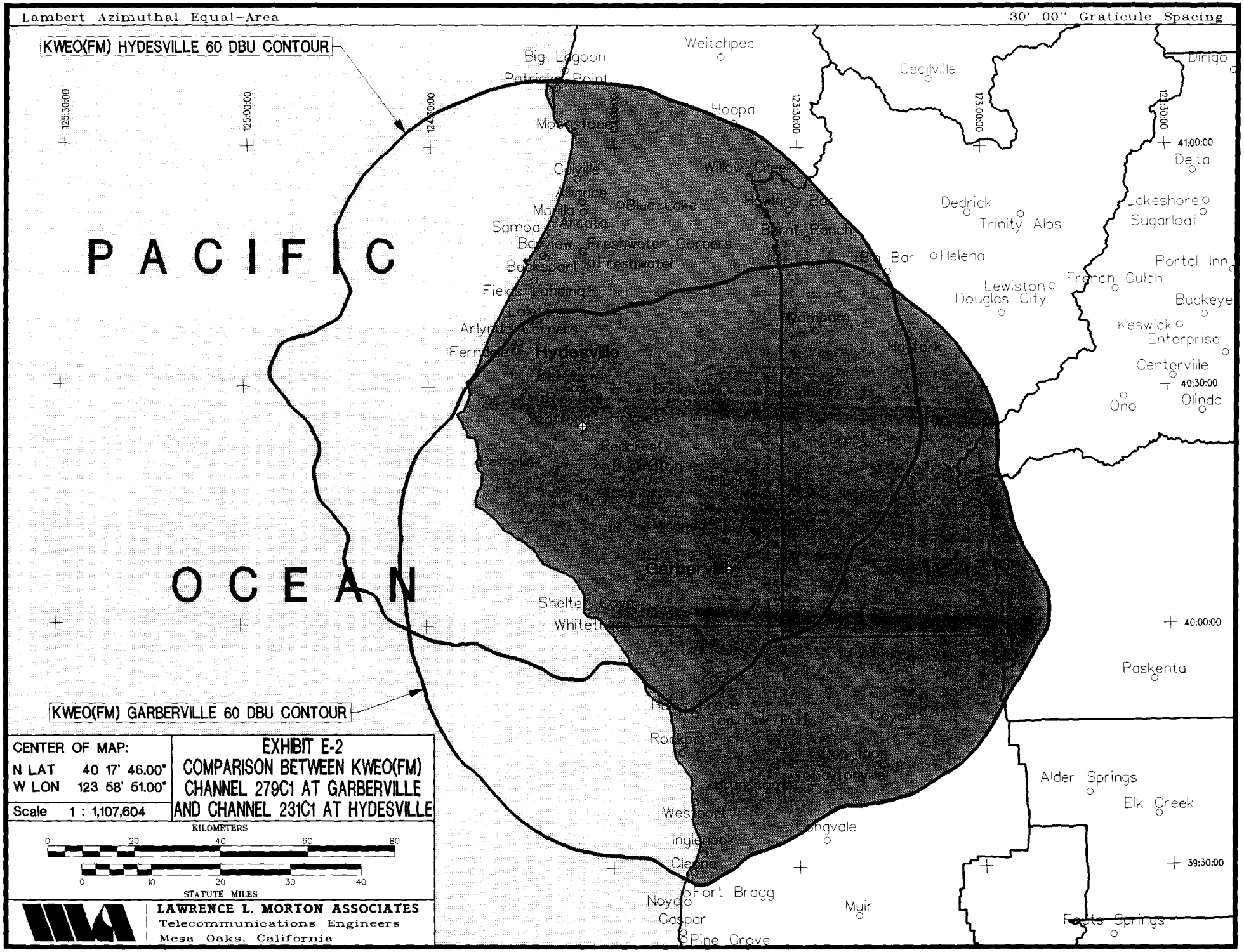
Lawrence L. Morton, P.E.

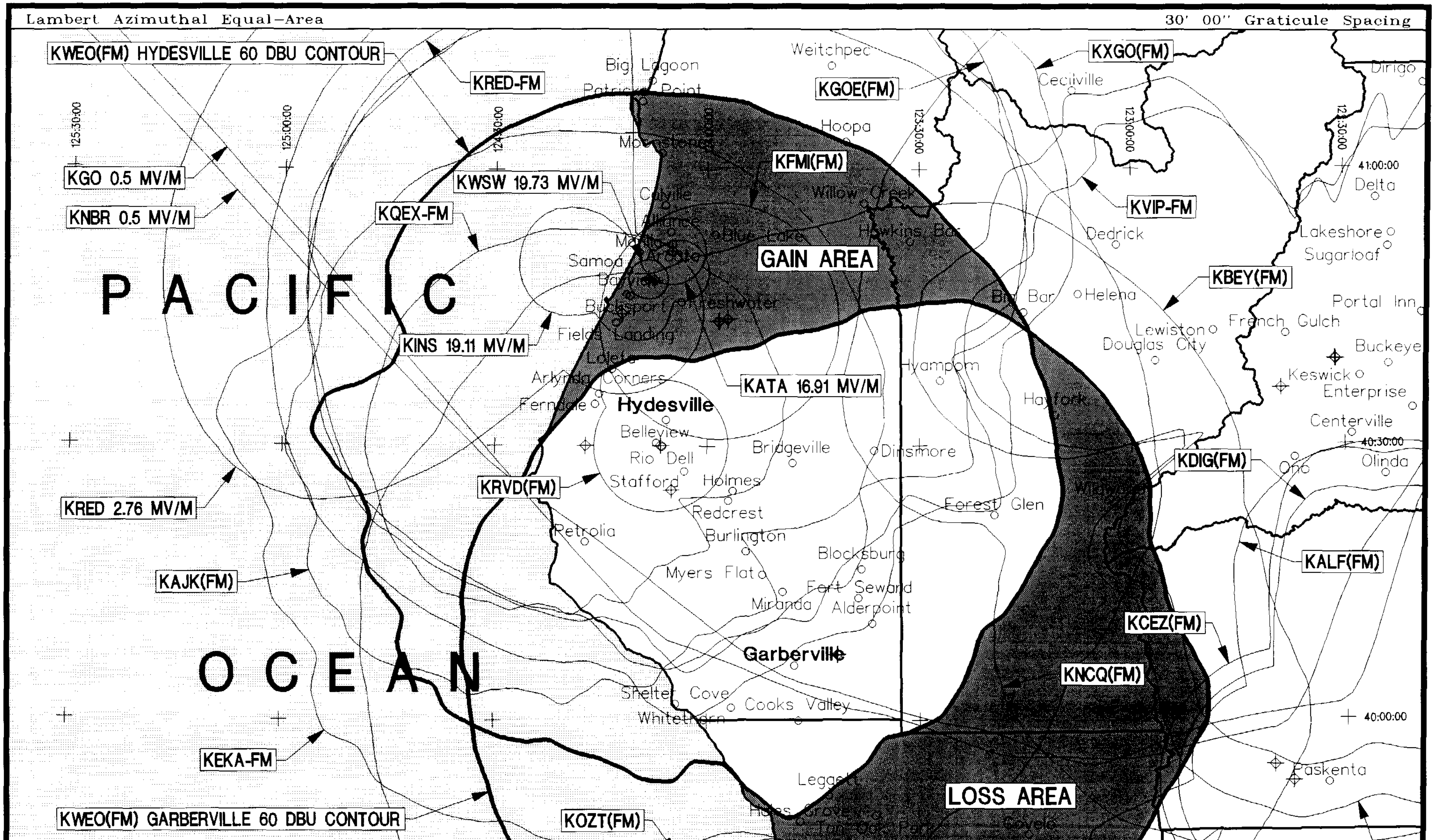
On August 24, 1994, before me, Nancy A. Chase, a Notary Public, in and for the State of California, personally appeared Lawrence L. Morton known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

My Commission expires 11/30/94

Notary Public

OFFICIAL SEAL
NANCY A. CHASE
Notary Public California
ORANGE COUNTY
My Comm. Expires Nov. 30, 199


Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
PACIFIC
OCEAN
Weitchpec
Big Lagoon
Patrick Point
Cecilville
Dirigo
Hoopa
Willow Creek
Hawkins Bar
Dedrick
Trinity Alps
Lakeshore
Sugarloaf
Delta
Blue Lake
Arcata
Samoa
Bayview
Freshwater Corners
Freshwater
Bucksport
Fields Landing
Burnt Ranch
Big Bar
Helena
Portal Inn
Lewiston
Douglas City
French Gulch
Buckeye
Keswick
Enterprise
Centerville
Olinda
Ono
Ferndale
Hydesville
Bridgeville
Hayfork
Forest Glen
Redcrest
Petrolia
Garberville
Shelter Cove
Whitethorn
Paskenta
Tan Oak Park
Rockport
Covelo
Alder Springs
Elk Creek
Westport
Inglenook
Cleone
Longvale
Fort Bragg
Noyo
Caspar
Muir
Pine Grove
Ferris Springs
125:30:00
125:00:00
124:30:00
123:30:00
123:00:00
41:00:00
40:30:00
40:00:00
39:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-2
COMPARISON BETWEEN KWEO(FM) CHANNEL 279C1 AT GARBERVILLE AND CHANNEL 231C1 AT HYDESVILLE
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

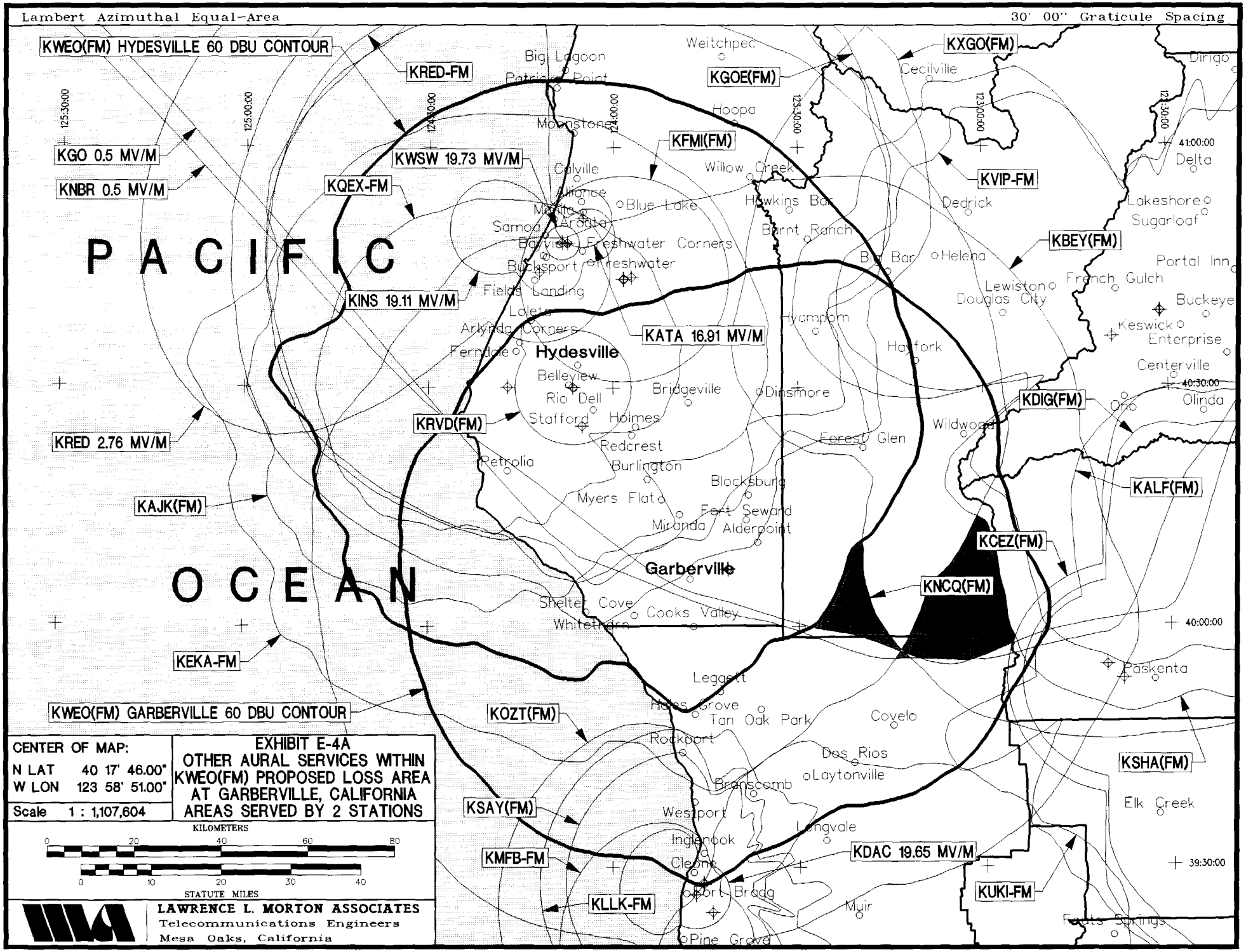


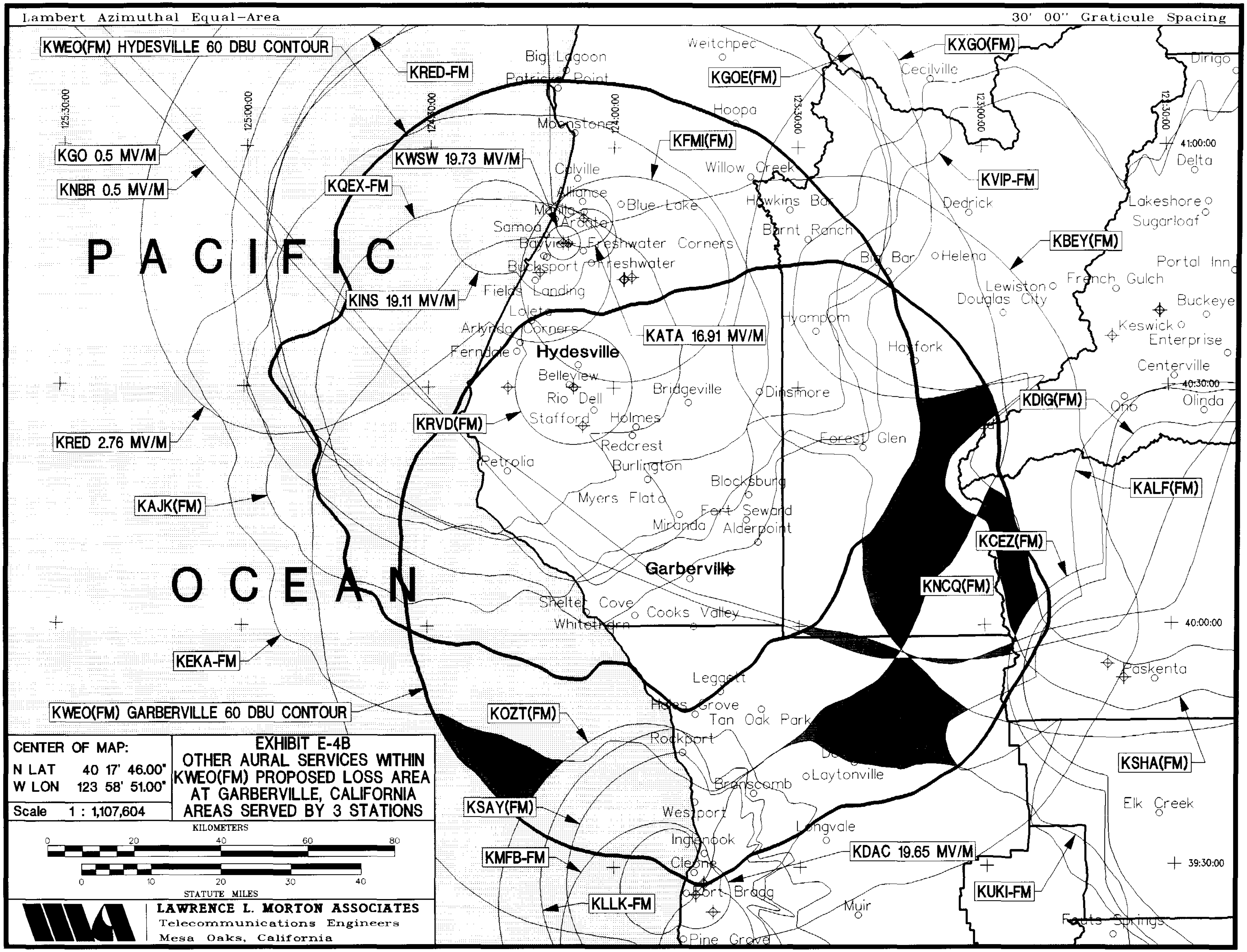
CENTER OF MAP:	
N LAT	40 17' 46.00"
W LON	123 58' 51.00"
Scale	1 : 1,107,604

EXHIBIT E-3
OTHER AURAL BROADCAST SERVICES WITHIN PROPOSED GAIN AND LOSS AREAS

KILOMETERS 0 20 40 60 80
0 10 20 30 40 STATUTE MILES

LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

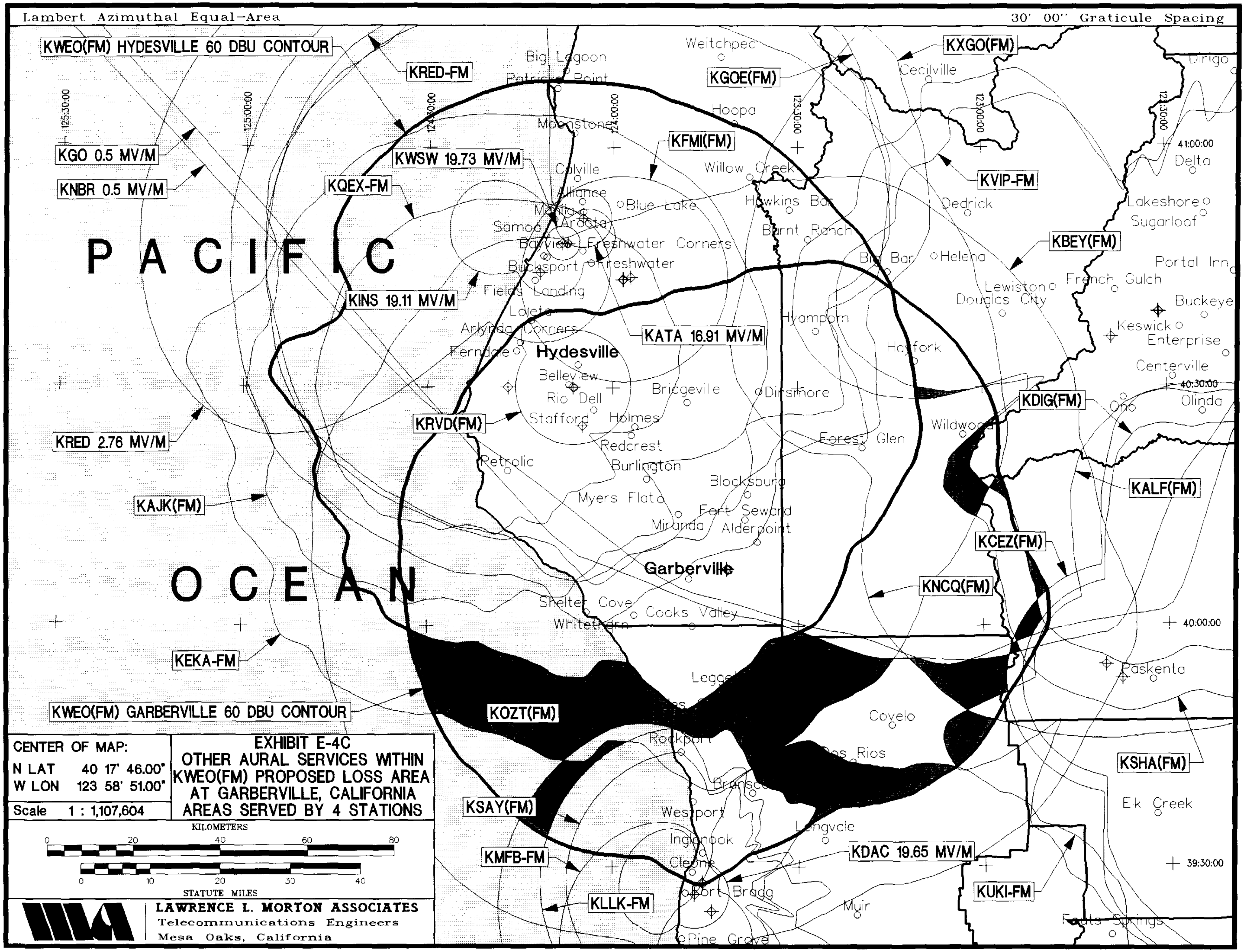

Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KRED-FM
KGOE(FM)
KXGO(FM)
KFMI(FM)
KWSW 19.73 MV/M
KQEX-FM
KVIP-FM
KGO 0.5 MV/M
KNBR 0.5 MV/M
KBEY(FM)
KINS 19.11 MV/M
KATA 16.91 MV/M
KRED 2.76 MV/M
KRVD(FM)
KDIG(FM)
KALF(FM)
KAJK(FM)
KCEZ(FM)
KNCQ(FM)
KEKA-FM
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
KOZT(FM)
KSHA(FM)
KSAY(FM)
KMFB-FM
KDAC 19.65 MV/M
KUKI-FM
KLLK-FM
PACIFIC
OCEAN
Hydesville
Garberville
Weitchpec
Big Lagoon
Cecilville
Dirigo
Hoopa
Moonstone
Willow Creek
Delta
Calville
Alliance
Blue Lake
Hawkins Bar
Dedrick
Lakeshore
Sugarloaf
Samoa
Arcata
Bayview
Freshwater Corners
Freshwater
Burnt Ranch
Bucksport
Big Bar
Helena
Portal Inn
Fields Landing
Lewiston
French Gulch
Douglas City
Buckeye
Loleta
Hyampom
Keswick
Arlynda Corners
Fernbridge
Hayfork
Enterprise
Centerville
Belleview
Rio Dell
Bridgeville
Dinsmore
Olinda
Stafford
Holmes
Wildwood
Redcrest
Forest Glen
Petrolia
Burlington
Blocksburg
Myers Flat
Fort Seward
Miranda
Alderpoint
Shelter Cove
Cooks Valley
Whitethorn
Paskenta
Leggett
Hales Grove
Tan Oak Park
Covelo
Rockport
Dos Rios
Laytonville
Branscomb
Elk Creek
Westport
Longvale
Inglenook
Cleone
Fort Bragg
Muir
Pine Grove
Potts Springs
125:30:00
125:00:00
124:30:00
124:00:00
123:30:00
123:00:00
41:00:00
40:30:00
40:00:00
39:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-4A
OTHER AURAL SERVICES WITHIN
KWEO(FM) PROPOSED LOSS AREA
AT GARBERVILLE, CALIFORNIA
AREAS SERVED BY 2 STATIONS
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

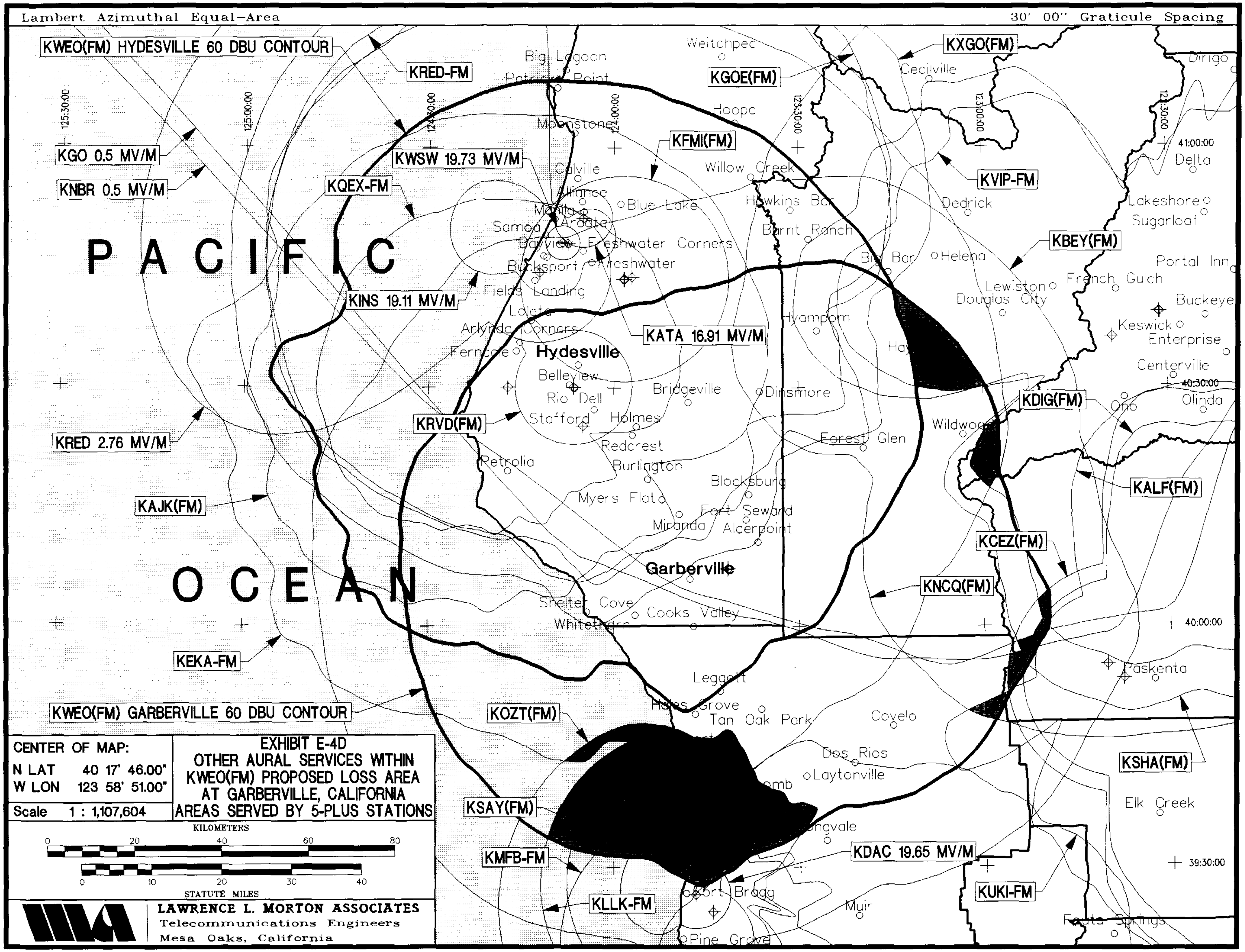


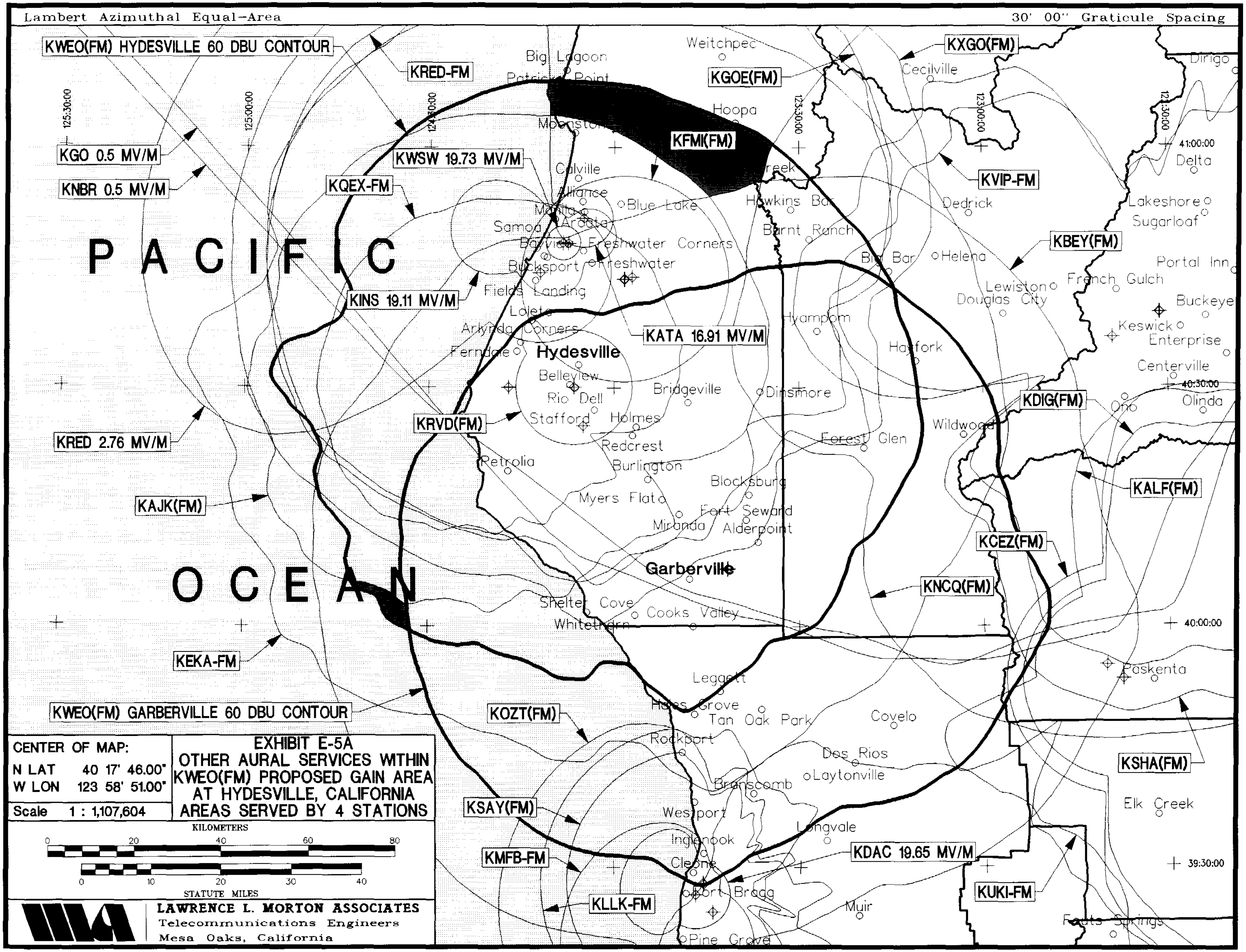
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604

EXHIBIT E-4B
OTHER AURAL SERVICES WITHIN
KWEO(FM) PROPOSED LOSS AREA
AT GARBERVILLE, CALIFORNIA
AREAS SERVED BY 3 STATIONS

LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KRED-FM
KGOE(FM)
KXGO(FM)
KGO 0.5 MV/M
KNBR 0.5 MV/M
KWSW 19.73 MV/M
KFMI(FM)
KVIP-FM
KQEX-FM
KBEY(FM)
KINS 19.11 MV/M
KATA 16.91 MV/M
KDIG(FM)
KRVD(FM)
KRED 2.76 MV/M
KALF(FM)
KAJK(FM)
KCEZ(FM)
KNCQ(FM)
KEKA-FM
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
KOZT(FM)
KSHA(FM)
KSAY(FM)
KMFB-FM
KDAC 19.65 MV/M
KUKI-FM
KLLK-FM
PACIFIC
OCEAN
Hydesville
Garberville
Big Lagoon
Patricks Point
Weitchpec
Cecilville
Dirigo
Hoopa
Moonstone
Colville
Willow Creek
Delta
Alliance
Blue Lake
Hawkins Bar
Dedrick
Lakeshore
Sugarloaf
Samoa
Arcata
Manila
Bayview
Freshwater Corners
Burnt Ranch
Big Bar
Helena
Bucksport
Freshwater
Portal Inn
Fields Landing
Lewiston
French Gulch
Douglas City
Buckeye
Loleta
Hyampom
Keswick
Arlynda Corners
Enterprise
Ferndale
Hayfork
Belleview
Centerville
Rio Dell
Bridgeville
Dinsmore
Olinda
Ono
Stafford
Holmes
Wildwood
Redcrest
Forest Glen
Petrolia
Burlington
Blocksburg
Myers Flat
Fort Seward
Miranda
Alderpoint
Shelter Cove
Cooks Valley
Whitethorn
Leggett
Paskenta
Covelo
Rockport
Dos Rios
Branscomb
Westport
Elk Creek
Longvale
Inglenook
Cleone
Fort Bragg
Muir
Pine Grove
Fouts Springs
125:30:00
125:00:00
124:30:00
124:00:00
123:30:00
123:00:00
122:30:00
41:00:00
40:30:00
40:00:00
39:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-4C
OTHER AURAL SERVICES WITHIN
KWEO(FM) PROPOSED LOSS AREA
AT GARBERVILLE, CALIFORNIA
AREAS SERVED BY 4 STATIONS
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KRED-FM
KGOE(FM)
KXGO(FM)
KGO 0.5 MV/M
KNBR 0.5 MV/M
KWSW 19.73 MV/M
KFMI(FM)
KVIP-FM
KQEX-FM
KBEY(FM)
KINS 19.11 MV/M
KATA 16.91 MV/M
KDIG(FM)
KRVD(FM)
KRED 2.76 MV/M
KALF(FM)
KAJK(FM)
KCEZ(FM)
KNCQ(FM)
KEKA-FM
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
KOZT(FM)
KSHA(FM)
KSAY(FM)
KDAC 19.65 MV/M
KMFB-FM
KUKI-FM
KLLK-FM
PACIFIC
OCEAN
Hydesville
Garberville
Big Lagoon
Patricks Point
Weitchpec
Cecilville
Dirigo
Hoopa
Moonstone
Delta
Colville
Willow Creek
Alliance
Blue Lake
Hawkins Bar
Dedrick
Lakeshore
Sugarloaf
Manila
Arcata
Samoa
Bayview
Freshwater Corners
Burnt Ranch
Bucksport
Freshwater
Big Bar
Helena
Portal Inn
Fields Landing
Lewiston
French Gulch
Douglas City
Buckeye
Loleta
Hyampom
Keswick
Arlynda Corners
Enterprise
Ferndale
Centerville
Belleview
Bridgeville
Dinsmore
Rio Dell
Ono
Olinda
Stafford
Holmes
Wildwood
Redcrest
Forest Glen
Petrolia
Burlington
Blocksburg
Myers Flat
Fort Seward
Miranda
Alderpoint
Shelter Cove
Cooks Valley
Whitethorn
Leggett
Paskenta
Hales Grove
Tan Oak Park
Covelo
Dos Rios
Laytonville
Elk Creek
Longvale
Fort Bragg
Muir
Pine Grove
Fouts Springs
125:30:00
125:00:00
124:30:00
124:00:00
123:30:00
123:00:00
122:30:00
41:00:00
40:30:00
40:00:00
39:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-4D
OTHER AURAL SERVICES WITHIN
KWEO(FM) PROPOSED LOSS AREA
AT GARBERVILLE, CALIFORNIA
AREAS SERVED BY 5-PLUS STATIONS
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KRED-FM
KGOE(FM)
KXGO(FM)
KFMI(FM)
KGO 0.5 MV/M
KNBR 0.5 MV/M
KWSW 19.73 MV/M
KQEX-FM
KVIP-FM
KBEY(FM)
KINS 19.11 MV/M
KATA 16.91 MV/M
KDIG(FM)
KRVD(FM)
KRED 2.76 MV/M
KALF(FM)
KAJK(FM)
KCEZ(FM)
KNCQ(FM)
KEKA-FM
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
KOZT(FM)
KSHA(FM)
KSAY(FM)
KMFB-FM
KDAC 19.65 MV/M
KUKI-FM
KLLK-FM
PACIFIC
OCEAN
Hydesville
Garberville
Big Lagoon
Patrick's Point
Weitchpec
Cecilville
Dirigo
Hoopa
Moonstone
Colville
Alliance
Blue Lake
Manila
Arcata
Samoa
Bayview
Freshwater Corners
Freshwater
Bucksport
Fields Landing
Loleta
Arlynda Corners
Ferndale
Belleview
Rio Dell
Stafford
Holmes
Bridgeville
Redcrest
Burlington
Petrolia
Myers Flat
Blocksburg
Miranda
Fort Seward
Alderpoint
Shelter Cove
Cooks Valley
Whitethorn
Hawkins Bar
Burnt Ranch
Big Bar
Helena
Dedrick
Hyampom
Hayfork
Dinsmore
Forest Glen
Wildwood
Lewiston
Douglas City
French Gulch
Delta
Lakeshore
Sugarloaf
Portal Inn
Buckeye
Keswick
Enterprise
Centerville
Ono
Olinda
Paskenta
Elk Creek
Leggett
Hales Grove
Tan Oak Park
Covelo
Rockport
Dos Rios
Laytonville
Branscomb
Westport
Longvale
Inglenook
Cleone
Fort Bragg
Muir
Pine Grove
Fouts Springs
125:30:00
125:00:00
124:30:00
123:30:00
123:00:00
122:30:00
41:00:00
40:30:00
40:00:00
39:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-5A
OTHER AURAL SERVICES WITHIN
KWEO(FM) PROPOSED GAIN AREA
AT HYDESVILLE, CALIFORNIA
AREAS SERVED BY 4 STATIONS
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

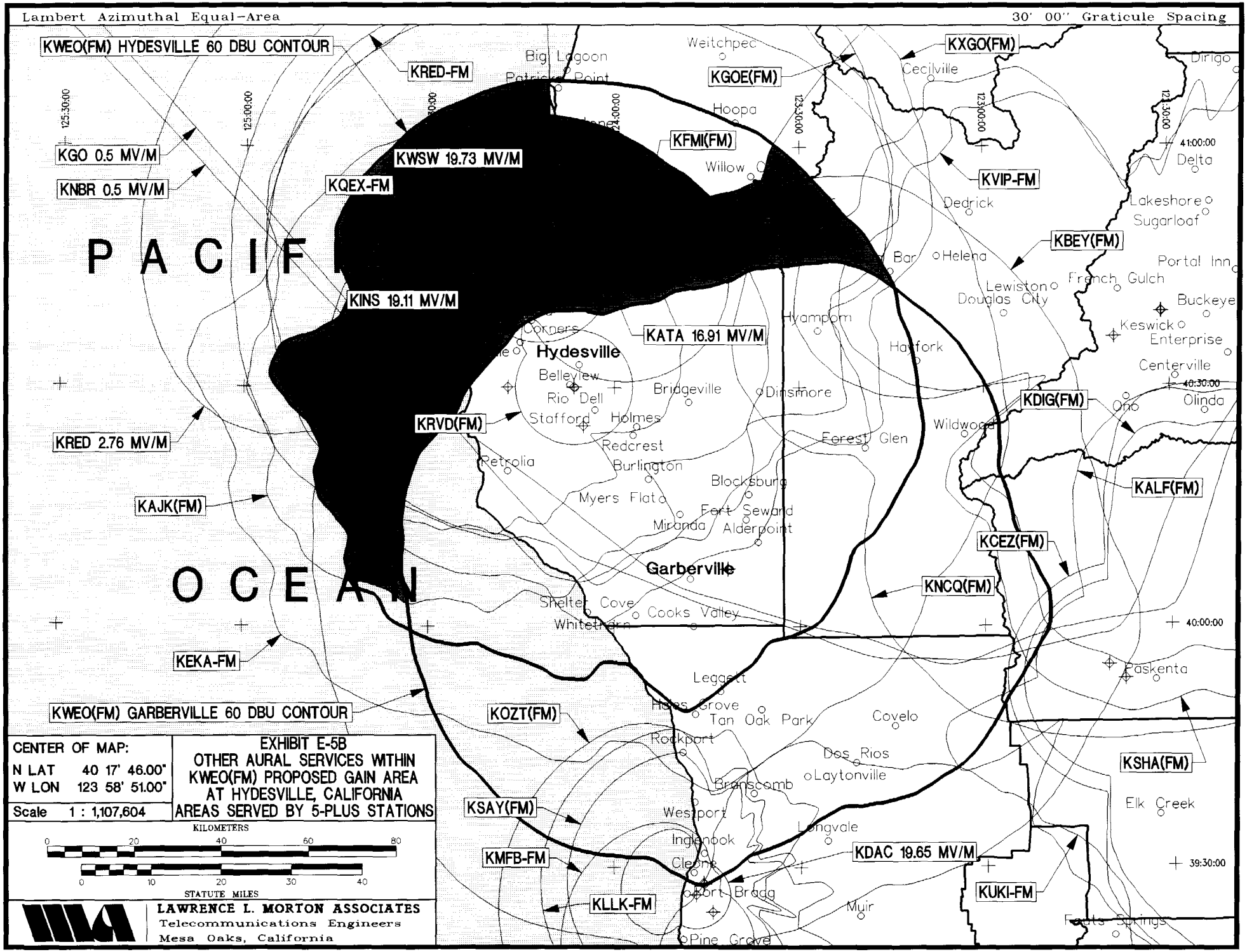

Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KRED-FM
KGOE(FM)
KXGO(FM)
KFMI(FM)
KVIP-FM
KBEY(FM)
KWSW 19.73 MV/M
KQEX-FM
KGO 0.5 MV/M
KNBR 0.5 MV/M
KINS 19.11 MV/M
KATA 16.91 MV/M
KRVD(FM)
KRED 2.76 MV/M
KDIG(FM)
KALF(FM)
KAJK(FM)
KCEZ(FM)
KNCQ(FM)
KEKA-FM
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
KOZT(FM)
KSAY(FM)
KSHA(FM)
KMFB-FM
KDAC 19.65 MV/M
KUKI-FM
KLLK-FM
PACIFIC OCEAN
Hydesville
Garberville
Weitchpec
Big Lagoon
Point
Hoopa
Willow
Cecilville
Dirigo
Delta
Dedrick
Lakeshore
Sugarloaf
Bar
Helena
Portal Inn
French Gulch
Lewiston
Douglas City
Buckeye
Keswick
Enterprise
Centerville
Olinda
Hyampom
Hayfork
Corners
Belleview
Rio Dell
Bridgeville
Dinsmore
Stafford
Holmes
Redcrest
Forest Glen
Wildwood
Retrolia
Burlington
Blocksburg
Myers Flats
Fort Seward
Miranda
Alderpoint
Shelter Cove
Cooks Valley
Whitethorn
Leggett
Hales Grove
Tan Oak Park
Covelo
Rockport
Dos Rios
Laytonville
Branscomb
Westport
Longvale
Inglenook
Cleone
Fort Bragg
Muir
Pine Grove
Elk Creek
Paskenta
Fouts Springs
125:30:00
125:00:00
123:30:00
123:00:00
41:00:00
40:30:00
40:00:00
39:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-5B
OTHER AURAL SERVICES WITHIN
KWEO(FM) PROPOSED GAIN AREA
AT HYDESVILLE, CALIFORNIA
AREAS SERVED BY 5-PLUS STATIONS
KILOMETERS
0 20 40 60 80
STATUTE MILES
0 10 20 30 40
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

EXHIBIT E-6
OTHER AURAL SERVICES WITHIN KWEO(FM)
PROPOSED LOSS AREA AT HYDESVILLE

Brett E. Miller
August 1994

NUMBER OF STATIONS SERVING THIS AREA	LAND AREA			POPULATION	
	SQUARE KILOMETERS	SQUARE MILES	% OF LOSS AREA	1990 CENSUS POPULATION	% OF LOSS AREA
0	0.00	0.00	0.00	0	0.00
1	0.34	0.13	0.00	0	0.00
2	667.37	257.67	9.45	16	0.17
3	1,956.74	755.50	27.72	2,128	22.11
4	2,649.82	1,023.10	37.53	2,758	28.66
5	842.03	325.11	11.93	2,554	26.54
6	565.27	218.25	8.01	545	5.66
7	244.96	94.58	3.47	252	2.62
8	125.63	48.51	1.78	1,325	13.77
9	7.64	2.95	0.11	45	0.47
10	0.00	0.00	0.00	0	0.00
11	0.00	0.00	0.00	0	0.00
12	0.00	0.00	0.00	0	0.00
13	0.00	0.00	0.00	0	0.00
14	0.00	0.00	0.00	0	0.00
15	0.00	0.00	0.00	0	0.00
16	0.00	0.00	0.00	0	0.00
17	0.00	0.00	0.00	0	0.00
18	0.00	0.00	0.00	0	0.00
19	0.00	0.00	0.00	0	0.00
20	0.00	0.00	0.00	0	0.00
21	0.00	0.00	0.00	0	0.00
22	0.00	0.00	0.00	0	0.00
23	0.00	0.00	0.00	0	0.00
24	0.00	0.00	0.00	0	0.00
25	0.00	0.00	0.00	0	0.00
TOTALS:	7,059.81	2,725.81	100.0 %	9,623	100.0 %

EXHIBIT E-7
OTHER AURAL SERVICES WITHIN KWEO(FM)
PROPOSED GAIN AREA AT HYDESVILLE

Brett E. Miller
August 1994

NUMBER OF STATIONS SERVING THIS AREA	LAND AREA			POPULATION	
	SQUARE KILOMETERS	SQUARE MILES	% OF GAIN AREA	1990 CENSUS POPULATION	% OF GAIN AREA
0	0.00	0.00	0.00	0	0.00
1	0.00	0.00	0.00	0	0.00
2	0.00	0.00	0.00	0	0.00
3	0.00	0.00	0.00	0	0.00
4	697.70	269.38	10.41	2,722	3.10
5	829.99	320.46	12.38	13,742	15.66
6	1,598.85	617.32	23.85	3,874	4.41
7	1,319.53	509.47	19.68	12,427	14.16
8	1,046.24	403.96	15.60	5,677	6.47
9	887.73	342.75	13.24	2,755	3.14
10	263.13	101.59	3.92	16,943	19.30
11	54.60	21.08	0.81	29,618	33.75
12	7.34	2.83	0.11	12	0.01
13	0.00	0.00	0.00	0	0.00
14	0.00	0.00	0.00	0	0.00
15	0.00	0.00	0.00	0	0.00
16	0.00	0.00	0.00	0	0.00
17	0.00	0.00	0.00	0	0.00
18	0.00	0.00	0.00	0	0.00
19	0.00	0.00	0.00	0	0.00
20	0.00	0.00	0.00	0	0.00
21	0.00	0.00	0.00	0	0.00
22	0.00	0.00	0.00	0	0.00
23	0.00	0.00	0.00	0	0.00
24	0.00	0.00	0.00	0	0.00
25+	0.00	0.00	0.00	0	0.00
TOTALS:	6,705.10	2,588.85	100.0 %	87,770	100.0 %

EXHIBIT E-8
STATIONS PROVIDING OTHER AURAL SERVICES WITHIN KWEO(FM) PROPOSED LOSS AREA

Brett E. Miller
August 1994

NUMBER	CALL LETTERS	CITY	STATE	FREQUENCY
1	KSHA	REDDING	CA	104.3 MHz
2	KUKI-FM	UKIAH	CA	103.3
3	KMFB-FM	MENDOCINO	CA	92.7
4	KEKA-FM	EUREKA	CA	101.5
5	KNCQ	REDDING	CA	97.3
6	KCEZ	CORNING	CA	100.7
7	KALF	RED BLUFF	CA	95.7
8	KBEY	GARBERVILLE	CA	104.7
9	KOZT	FORT BRAGG	CA	95.3
10	KDIG	ORLAND	CA	106.7
11	KVIP-FM	REDDING	CA	98.1
12	KSAY	FORT BRAGG	CA	97.7
13	KLLK-FM	FORT BRAGG	CA	96.7
14	KNBR	SAN FRANCISCO	CA	680. KHz
15	KGO	SAN FRANCISCO	CA	810
16	KDAC	FORT BRAGG	CA	1230

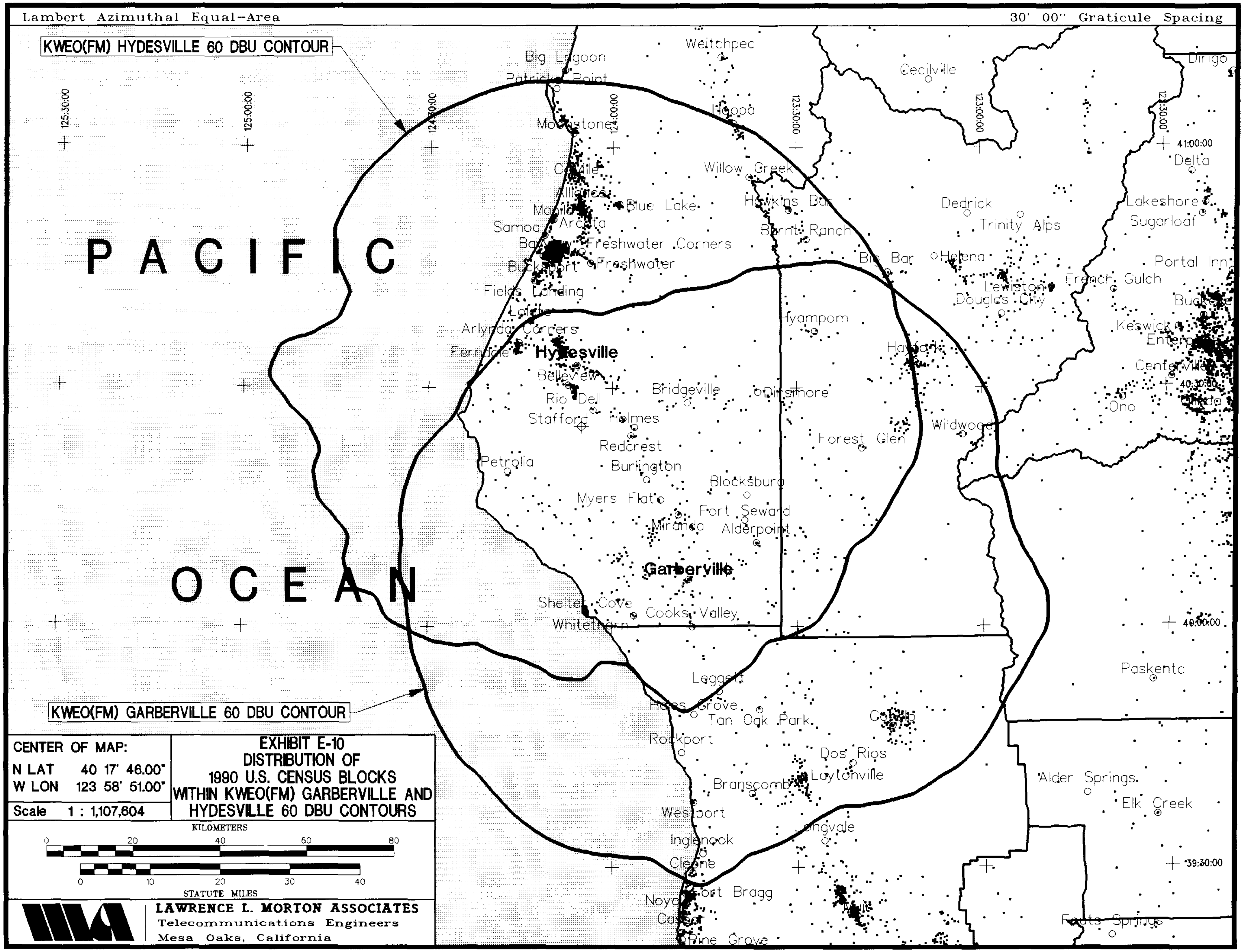
EXHIBIT E-9
STATIONS PROVIDING OTHER AURAL SERVICES WITHIN KWEO(FM) PROPOSED GAIN AREA

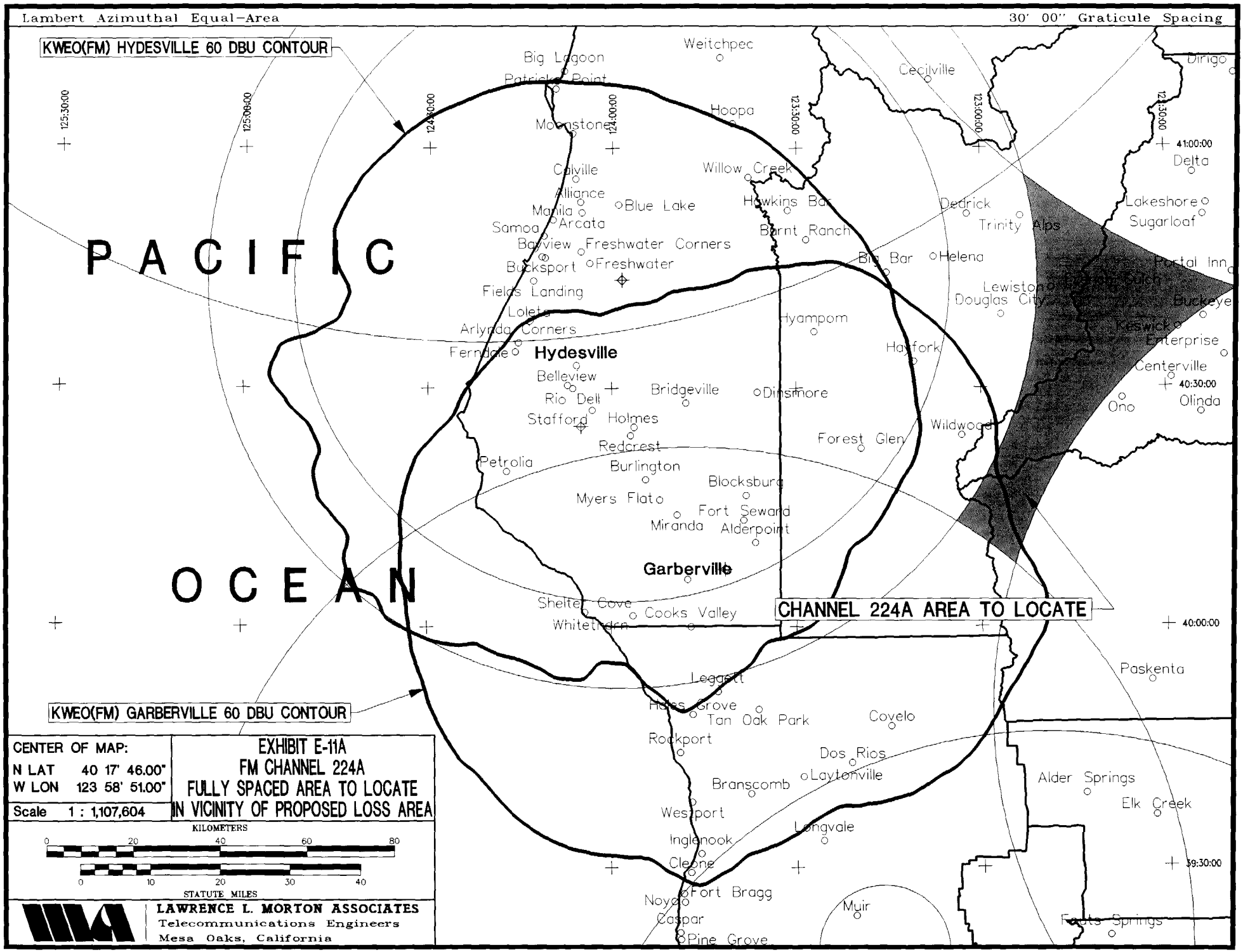
RECEIVED
AUG 2 6 1994
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

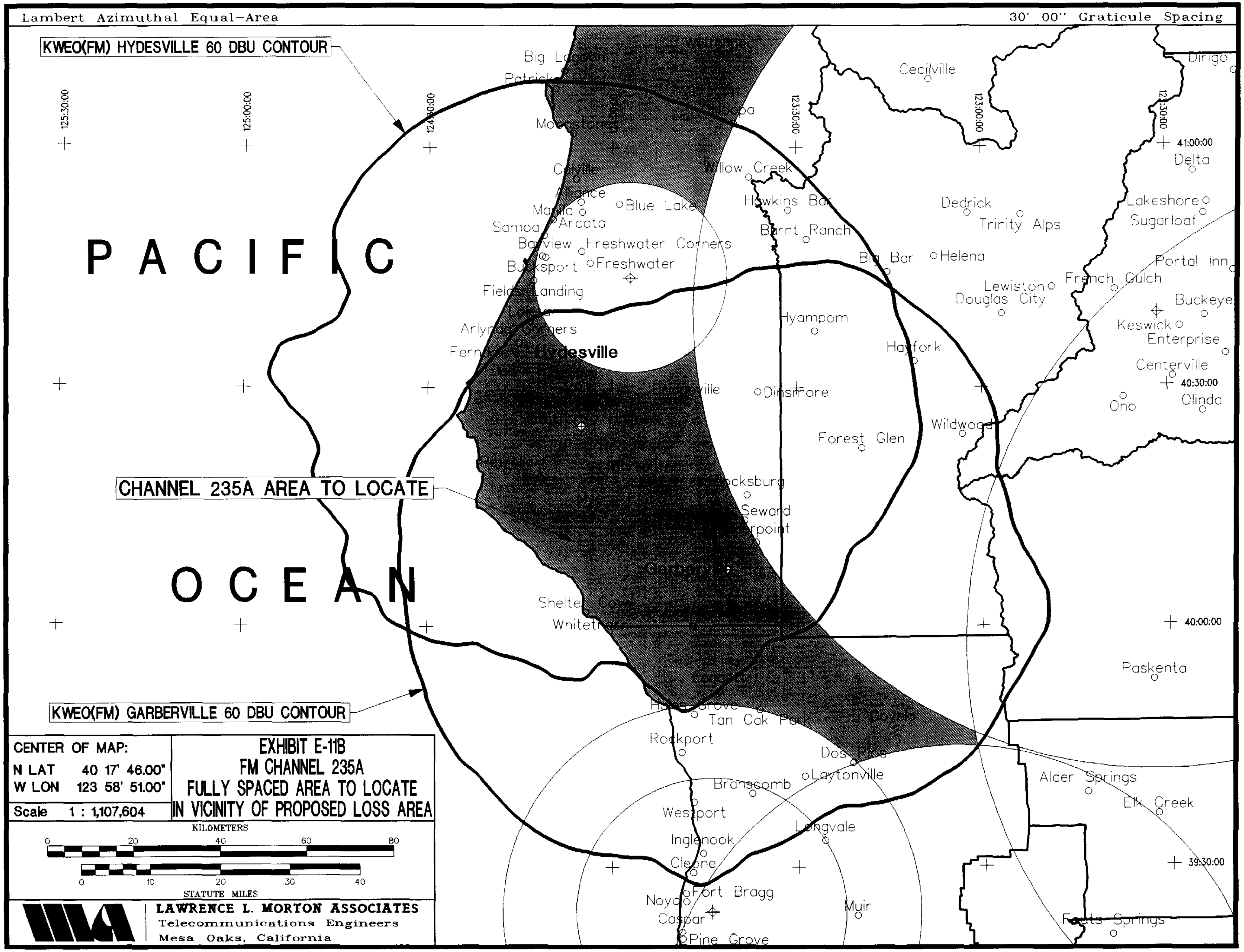
Brett E. Miller

August 1994

NUMBER	CALL LETTERS	CITY	STATE	FREQUENCY
1	KRVD	RIO DELL	CA	107.1 MHz
2	KXGO	ARCATA	CA	93.1
3	KQEX-FM	FORTUNA	CA	100.3
4	KSHA	REDDING	CA	104.3
5	KEKA-FM	EUREKA	CA	101.5
6	KNCQ	REDDING	CA	97.3
7	KRED-FM	EUREKA	CA	92.3
8	KGOE	EUREKA	CA	105.5
9	KAJK-FM	FERNDALE	CA	99.1
10	KBEY	GARBERVILLE	CA	104.7
11	KFMI	EUREKA	CA	96.3
12	KVIP-FM	REDDING	CA	98.1
13	KNBR	SAN FRANCISCO	CA	680. KHz
14	KWSW	EUREKA	CA	790
15	KGO	SAN FRANCISCO	CA	810
16	KINS	EUREKA	CA	980
17	KATA	ARCATA	CA	1340
18	KRED	EUREKA	CA	1480


Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
PACIFIC
OCEAN
Hydesville
Garberville
Big Lagoon
Weitchpec
Cecilville
Dirigo
Hoopa
Willow Creek
Hawkins Bar
Burnt Ranch
Blue Lake
Arcata
Samoa
Freshwater Corners
Freshwater
Fields Landing
Arlynda Corners
Ferndale
Belleview
Rio Dell
Stafford
Holmes
Redcrest
Burlington
Bridgeville
Dinsmore
Petrolia
Myers Flat
Blocksburg
Fort Seward
Miranda
Alderpoint
Shelter Cove
Cooks Valley
Whitethorn
Leggett
Hales Grove
Tan Oak Park
Rockport
Dos Rios
Laytonville
Branscomb
Westport
Longvale
Inglenook
Cleone
Fort Bragg
Pine Grove
Hyampom
Hayfork
Forest Glen
Wildwood
Dedrick
Trinity Alps
Helena
Big Bar
Lewiston
Douglas City
French Gulch
Lakeshore
Sugarloaf
Delta
Portal Inn
Keswick
Centerville
Ono
Paskenta
Alder Springs
Elk Creek
Fouts Springs
41:00:00
40:30:00
40:00:00
39:30:00
125:30:00
125:00:00
124:30:00
124:00:00
123:30:00
123:00:00
122:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-10
DISTRIBUTION OF
1990 U.S. CENSUS BLOCKS
WITHIN KWEO(FM) GARBERVILLE AND
HYDESVILLE 60 DBU CONTOURS
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
CHANNEL 224A AREA TO LOCATE
PACIFIC
OCEAN
Hydesville
Garberville
Weitchpec
Big Lagoon
Patrick Point
Cecilville
Dirigo
Hoopa
Moonstone
Willow Creek
Colville
Alliance
Manila
Blue Lake
Arcata
Samoa
Bayview
Freshwater
Corners
Bucksport
Freshwater
Fields Landing
Loleta
Arlynda Corners
Ferndale
Belleview
Rio Dell
Bridgeville
Dinsmore
Stafford
Holmes
Redcrest
Petrolia
Burlington
Blocksburg
Myers Flato
Fort Seward
Miranda
Alderpoint
Shelter Cove
Cooks Valley
Whitethorn
Leggett
Tan Oak Park
Rockport
Covelo
Dos Rios
Laytonville
Branscomb
Westport
Longvale
Inglenook
Cleone
Fort Bragg
Noyo
Caspar
Pine Grove
Muir
Hawkins Bar
Barnt Ranch
Big Bar
Helena
Dedrick
Trinity Alps
Lakeshore
Sugarloaf
Delta
Portal Inn
Lewiston
Douglas City
Buckeye
Keswick
Enterprise
Centerville
Olinda
Ono
Hayfork
Hyampom
Wildwood
Forest Glen
Paskenta
Alder Springs
Elk Creek
Ruths Springs
125:30:00
125:00:00
124:30:00
124:00:00
123:30:00
123:00:00
122:30:00
41:00:00
40:30:00
40:00:00
39:30:00
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-11A
FM CHANNEL 224A
FULLY SPACED AREA TO LOCATE
IN VICINITY OF PROPOSED LOSS AREA
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
KWEO(FM) HYDESVILLE 60 DBU CONTOUR
CHANNEL 235A AREA TO LOCATE
KWEO(FM) GARBERVILLE 60 DBU CONTOUR
PACIFIC
OCEAN
125:30:00
125:00:00
124:30:00
123:30:00
123:00:00
41:00:00
40:30:00
40:00:00
39:30:00
Big Lagoon
Weitchpec
Cecilville
Dirigo
Moonstone
Hoopa
Willow Creek
Delta
Blue Lake
Alliance
Manila
Arcata
Samoa
Hawkins Bar
Burnt Ranch
Dedrick
Trinity Alps
Lakeshore
Sugarloaf
Freshwater Corners
Freshwater
Bucksport
Fields Landing
Big Bar
Helena
Portal Inn
Lewiston
Douglas City
French Gulch
Buckeye
Keswick
Enterprise
Hyampom
Hayfork
Arlynda Corners
Hydesville
Centerville
Dinsmore
Ono
Olinda
Wildwood
Forest Glen
Seward
Garberville
Whitethorn
Paskenta
Tan Oak Park
Covelo
Rockport
Dos Rios
Laytonville
Branscomb
Alder Springs
Elk Creek
Westport
Longvale
Inglenook
Cleone
Fort Bragg
Noyo
Caspar
Muir
Pine Grove
Fouts Springs
CENTER OF MAP:
N LAT 40 17' 46.00"
W LON 123 58' 51.00"
Scale 1 : 1,107,604
EXHIBIT E-11B
FM CHANNEL 235A
FULLY SPACED AREA TO LOCATE
IN VICINITY OF PROPOSED LOSS AREA
KILOMETERS
0 20 40 60 80
0 10 20 30 40
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California